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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,813	05/28/2002	Nigel Jeffrie Ricketts	RR-491 PCT/US	3822

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Rodman & Rodman  
7 South Broadway  
White Plains, NY 10601

EXAMINER

ANDREWS, MELVYN J

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

eb13

# Office Action Summary

Application No.

10/031,813

Applicant(s)

RICKETTS ET AL.

Examiner

Melvyn J. Andrews

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-- Th MAILING DATE of this communication appears on th cover she t with th correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15 and 17-33 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15 and 17-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

The restriction is modified in view of applicants' amendment of September 26, 2003.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, Claim(s) 1 to 12 and 33 , drawn to a cover gas composition.

Group II, Claim(s) 14, 15 and 17 to 32, drawn to method of protecting molten magnesium.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claim 1 is obvious in view of Dougherty, Jr et al (US 5,115,868) , which discloses a fire extinguishing composition including a fluorine containing gas (col. 2, line 65 to col. 3, line 33) which renders the claimed cover gas composition obvious accordingly the special technical features linking the two groups does not provide a contribution over the prior art and no single inventive concept exists.

Claims 14, 15 and 17 to 32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Applicants' election with traverse of Claims 1-12 in Paper No. 10 and (new) Claim 33 in Paper No.12 is acknowledged. The traversal is on the ground(s) that were

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set forth in Paper No.10 This is not found persuasive because the special technical features linking the two (previously three) groups as set forth in Claim 1 does not provide a contribution over the prior art Dougherty et al (US 5,115,868) and no single inventive concept exists as set forth in Paper No.9.

Applicants' arguments in Paper No.12 are not convincing that Claim 1 is patentable over Dougherty et al. Applicants have not provided any arguments why Claim 1 is patentable over Dougherty et al

Applicants' further arguments in Paper No.12 of September 26, 2003 are not well taken because this is a 371 application as such the PCT Rules have been followed but applicants argument about a search not being burdensome does not relate to a restriction in a 371 application .

Applicants' statement in Paper No.12 that the Australian IPER overcame the objections is not well taken because IPER(see Form PCT/IPEA 409 page 4/4) states that "The invention disclosed in claims 1-13 is not novel in the light of the documents D1-D3."

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 14, 15 and 17 to 32 drawn to an invention nonelected with traverse in Paper No: 12. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT publication WO 96/22129. The PCT publication discloses compounds suitable for processes for controlling or extinguishing fires ( Page 7, lines 21 to last line, page 12, lines 21-23 and page 14, lines 2-7) it would have been obvious to one of ordinary skill in the art to select a compound with a low GWP since GWP is a result effective variable *In re Boesch*, 205 USPQ 215.

***Response to Arguments***

Applicant's arguments filed September 26, 2003 have been fully considered but they are not persuasive.

Applicants' argue that the amendment "adapted for the protection of molten magnesium" distinguishes the claimed cover gas composition from the PCT Publication WO96/22129 . The examiner does not agree because the amendment does not further limit the composition . Applicant argues that those skilled in the art know that there is an art recognized distinction between cover gas compositions for protecting magnesium and fire extinguishing composition if this is true then such distinction should be claimed but is not since the amount of fluorine containing inhibiting agent is only claimed

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explicitly in Claims 10, 11 and 12 and both these concentrations read on no inhibiting agent. The use of the cover gas compositions as a quiescent flow and at low pressures do not relate to the composition only to a method of using. .

Claims 1-12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty Jr et al (US 5,115, 868). Dougherty Jr et al discloses compositions for extinguishin, preventing or controlling fires (col.2, line 65 to col.3, line 33, col.4, line 31 to 38 and Examples 1 and 5) which include difluoromethane (HFC-32) , heptafluoropropane (HFC ea), 1,1,1,2 tetrafluoroethane (HFC-134a) and Dougherty Jr et al discloses that GWP is a result effective variable (Example 4) it would have been obvious to one of ordinary skill in the art to select a compound with a low GWP since the GWP is a result effective variable *In re Boesch*, 205 USPQ 215.

### ***Response to Arguments***

Applicant's arguments filed September 26, 2003 have been fully considered but they are not persuasive.

Applicants argue that Dougherty Jr. et al discloses a composition consisting essentially of trifluormethane but applicants' composition does not include trifluoromethane is not well taken because applicants' composition does not exclude trifluoromethane. With respect to the amount of propellant Dougherty Jr. et al claims a fire extinguishing composition comprising a propellant of at least 0.5 weight percent

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(col 1, lines 31 to 60) but applicants claim less than 1 % by volume (Claim 10) which reads on zero.

Claims 1-8, 10-12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT publication WO 91/02564. The PCT publication discloses fluorinated hydrofluorocarbons such as pentafluorethane (page 4, lines 1 to 20) it would have been obvious to one of ordinary skill in the art to select a compound with a low GWP since GWP is a result effective variable *In re Boesch*, 205 USPQ 215.

### ***Response to Arguments***

Applicant's arguments filed September 26, 2003 have been fully considered but they are not persuasive. Applicants' arguments with respect to the amount of hydrofluorocarbons has been noted but is not persuasive because since Claims 1 to 9 and 33 do not claim any concentration. As with respect to Claims 10 to 12 these claim a concentration range with an upper limit but the lower limit reads on zero which can be interpreted as applicants' Claim 1 containing pentafluorethane (page 4, line 20) which is not different from Claim 7. Whereas applicants' Claim 10 claims an inhibiting agent "that is less than 1% by volume of the composition" so that it may contain a fluorine containing inhibiting agent which is not patentably distinct from WO 91/02564 Claim 2 which claims a compound is employed at a level of less than about 15% (v/v) which range overlaps the claimed ranges.

Claims 1-12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable

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over PCT publication WO 96/22129, Dougherty Jr et al (US 5,115, 868) and PCT publication WO 91/02564 as applied to claim 1 above, and further in view of Ricketts et al (US 6,167,944). The PCT publications and the patent to Dougherty et al do not explicitly disclose a cover gas for molten magnesium but Ricketts et al discloses a casting magnesium ingots using protective cover gas using dilute SF<sub>6</sub> / dry air gas mixture but not the claimed fluoride inhibiting agents with low GWP but these are disclosed by the '129 publication, Dougherty Jr et al and the '944 publication, it would have been obvious to one of ordinary skill in the art to select a compound with a low GWP since GWP is a result effective variable *In re Boesch*, 205 USPQ 215.

### ***Response to Arguments***

Applicant's arguments filed September 26, 2003 have been fully considered but they are not persuasive. Applicants arguments that there is no incentive or motivation to combine Ricketts et al with PCT publication WO 96/22129, Dougherty Jr et al (US 5,115, 868) and PCT publication WO 91/02564 is not well taken because fire control is the objective in all cases .

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Milbrath et al (US 6,537,346) discloses molten magnesium cover gas using fluorocarbons.




**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvyn J. Andrews whose telephone number is 703-308-3739. The examiner can normally be reached on 8:00A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

  
**MELVYN ANDREWS**  
**PRIMARY EXAMINER**

mja  
December 4, 2003